WHAT IS CLAIMED IS:

1. A vehicle headlamp apparatus comprising:

a headlamp for illuminating ahead of a vehicle;

image capture means for capturing an image ahead of the vehicle;

road terminal end determining means for determining a terminal end of a road ahead of the vehicle from the image captured by the image capture means; and

light distribution control means for varying a light distribution of the head lamp so as to illuminate a location which is determined to be the terminal end of the road by the road terminal end determining means.

2. A vehicle headlamp apparatus as set forth in Claim 1, further comprising leading vehicle/oncoming vehicle recognition means for recognizing a leading vehicle or an oncoming vehicle from the image captured by the image capture means,

wherein the light distribution is varied to be directed downward when the leading vehicle/oncoming vehicle recognition means recognizes a leading vehicle or an oncoming vehicle.

3. A vehicle headlamp apparatus as set forth in Claim 1, wherein the variation of the light distribution is implemented

gradually.

4. A vehicle headlamp apparatus as set forth in Claim 2, wherein the variation of the light distribution is implemented gradually.

5. A vehicle headlamp apparatus as set forth in Claim 2, wherein an optical axis of the headlamp is swiveled according to a traveling path or road which is estimated from a steered angle of a steering wheel or the image capture means while the cut-off line remains raised.

6. A vehicle headlamp apparatus as set forth in Claim 1, wherein light distribution control means includes a driving means which controls a vertical movement of a cut-off line of the headlamp.

7. A vehicle headlamp apparatus as set forth in Claim 6, wherein the cut-off line is controlled separately for a subject vehicle driving lane and an oncoming vehicle driving lane.

8. A vehicle headlamp apparatus as set forth in Claim 1, wherein a center axis of the image capture means is disposed to become parallel with an optical axis of the headlamp.

9. A vehicle headlamp apparatus as set forth in Claim 7, wherein the center axis of the image capture means is disposed at the same height as that of the optical axis of the headlamp.

10. A vehicle headlamp apparatus as set forth in Claim 1, wherein recognition of the terminal end of the road is implemented based on a white line of the road.

11. A vehicle headlamp apparatus as set forth in Claim 1, wherein recognition of the terminal end of the road is implemented based on a structure indicating a road boundary.